

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 through 48 (Cancelled).

49. (Original) A fluid removal apparatus comprising:

a blood removal catheter for insertion into a peripheral vein or artery and having a size 16 standard gage needle or less;

a filter having a blood inlet port coupled to the blood removal catheter, a blood outlet port, an excess fluid removal port, and a blood flow passage with porous membrane which passes fluids to the fluid removal port and retains solutes of 50,000 Daltons or greater, and

a blood return catheter for inserting into a peripheral vein or artery and having a size of 16 standard gage needle or less.

50. (Original) An apparatus as in claim 49 further comprising a blood pump coupled to pump blood into the filter.

51. (Original) An apparatus as in claim 49 further comprising a valve coupled to the excess fluid removal port of the filter, and the valve cyclically switched to turn on and off flow of the excess fluid from the filter.

52. (Original) An apparatus as in claim 49 wherein the filter includes capillary, hollow fibers.

53. (Original) An apparatus as in claim 49 wherein the hollow fibers have filtering pores which retain in the blood solutes greater than 50,000 Daltons.
54. (Original) An apparatus as in claim 49 wherein the hollow fibers have blood passages of approximately 0.2 mm or less in diameter.